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AUTHOR Hensley, Wayne E.; Angoli, Marilyn
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ABSTRACT

Both balance and reinforcement theories were used in an examination of the perceptual distortion of height among 146 college debaters. Balance theory predicted that losers would distort winners' heights upward; reinforcement theory predicted that winners would distort losers' heights upward. The results confirmed both predictions. The possibility that the debaters were given to systematic overstatement as a general tendency was examined by observing their estimates of judges' heights. Given the fact that there was no distortion of judges' heights, this possibility was rejected. (Author/FL)

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The Perceptual Distortion of Height in Intercollegiate Debate

Wayne E. Hensley

University of Wisconsin-Milwaukee

and

Marilyn Angoli

Arizona State University

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Running Head: Perceptual Distortion

Abstract

Using both balance and reinforcement theories, this study examined the perceptual distortion of height among college debaters (N = 146). Balance theory predicted that losers would distort winners' heights upward. Reinforcement theory predicted that winners would distort losers' heights upward. Both predictions were confirmed. The possibility that the debaters were given to systematic overstatement as a general tendency was examined by observing their estimates of judges' heights. Given the fact that there was no distortion of judges' heights, this possibility was rejected. It was suggested that the perceptual distortion of height is a viable psychological occurrence extending to everyday life.

(78 words)

The Perceptual Distortion of Height in a Communication Field Setting

In recent years considerable work has been done on the topic of perceptual distortion of height. Early work concentrated on the area of status and perceptual distortion. It was shown that as the authority or the academic status of an individual increased, estimates made of that individual's height also increased (4, 16). This general finding was corroborated by Lechelt (9) when he demonstrated that occupational prestige and estimates made of the height of a person in that occupation covaried together. That is, the more prestigous the occupation of a person the taller the person is estimated to be. The principle seems clear that the more esteem we have for a position, the taller we estimate the holders of that position to be.

This line of research may be conceptualized generally in a balance theory approach. In most cases, a highly regarded job or position is occupied by an unknown or at least an unfamiliar individual. Given the esteem we have for the position, we apparently surmise that the person filling the position must be exceptional in some way in order to fulfill the pressing demands of the office. From a linguistic standpoint, the observer might reason that it would take a "big man to fill those shoes." One means for achieving balance in this situation is to make the occupant of the position and the position itself more congruent. Since Americans seem to regard physical height as a positive attribute, at least for males (7, p. 166), congruence may be achieved by perceiving the individual as being taller than he actually is.

Operating from a different vantage point, Bleda (2,3) investigated perceptual distortion of height as a function of reinforcement theory. The

reinforcement explanation posits that perceived or induced similarity of attitudes between persons acts as an unconditional stimulus. In essence, it is gratifying to most of us to know that another person shares our views. In turn, the affective reaction produced by the agreement or disagreement becomes associated with the other person. Thus, a previously unknown person will presumably elicit a conditioned response. One form of this response is a personal evaluation, i.e. the distortion of the message source's height. As evidence, the data do indicate that as perceived attitudinal similarity increases, height estimates of the message source also increase (2, 3).

It should be emphasized that these explanations are not to be regarded as mutually exclusive. It may be that both approaches are accurate but in different circumstances. However, until such time as it can be demonstrated that one explanation is more appropriate than the other, we are left with only conjectures. Hence, the present investigation seeks to examine a circumstance in which the same people are placed in a situation in which either balance theory and/or the reinforcement theory explanation of the perceptual distortion of height may operate.

Setting for the study

Intercollegiate debate involves almost exclusively student volunteers. The amount of work necessitated to do well borders on the unbelievable and there is virtually no public recognition. Whatever rewards accrue lie within the activity per se. But, limited as they are, one of these rewards is winning the debate. It takes only a few hours with college debaters to confirm the fact that more successful debaters have higher esteem among their peers.

That winning a debate is a reinforcing event has been demonstrated by Scott (14, 15). Further, debaters seem to have a sense of the outcome of a

debate even before the results have been formally announced. In particular, they are unusually accurate in their prediction of losses (11). Keeping these facts in mind, there are at least three possible outcomes for the perceptual distortion of height at the conclusion of a debate. First, balance theory would predict that the losing team might distort the heights of the winning team upward because the winning team had just gained status by the act of winning. Second, reinforcement theory would predict that the winning team might distort the heights of the losing team upward because the losing team are harbingers of reinforcing news. The news, of course, is that the winning team is now one step closer to a trophy than they were before the debate. The third possibility is that both processes might simultaneously operate.

Method

Each fall the University of Wisconsin-Milwaukee hosts a novice debate tournament. At the 1977 tournament, a total of 18 teams competed. Each team completed a total of six preliminary debates. These preliminary rounds provided the opportunity to sample for this study. At the conclusion of each debate, the participants were asked to complete a questionnaire which included how tall they were and estimates of the other debaters' heights. In addition, the debaters were also asked to estimate the height of the judge and to predict whether they had won or lost the debate. Following this procedure, 200 responses were gathered. Data is therefore available from 93% of the total available sample population.

The procedure followed here is in sharp distinction to all previous studies of perceptual distortion of which we are aware (1, 2, 3, 4, 6, 8, 9, 10, 12, 13, 16). All the earlier studies have been experimental investigations conducted

in the laboratory or in quasi-experimental settings. Clearly the behavior of individuals in laboratory type studies cannot be called "unnatural" but it may be accurate to call it "unreal." By contrast, these debaters would have been at this tournament and would have engaged in these debates regardless of whether this study had been done or not. The perceptions we are measuring cannot be called contrived in any sense of the word. This, we believe, is a salient feature of the data which follow.

Results and Discussion

Our first concern was to ascertain that the previously observed accuracy of debaters' perceptions of winning and losing was again in evidence. Murphy and Hensley (11) found that highschool debaters knew when they lost with surprising accuracy; however, they were unable to predict winning beyond a random chance level. The data in Table 1 show a very similar trend. When debaters are willing to admit to others that they lost the debate, then their perceptions are unusually accurate (by the sign test, $Z = 3.02$; $p < .01$). However, few debaters (N = 28) openly admit they have lost. In fact, just over 80% (N = 118) of the debaters thought they had been victorious. Again, the reports of winning and actual victories seem to be no better than chance. Hence, the same basic pattern found earlier among high school students (11) is confirmed for college debaters also.

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Insert Table 1 about here

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Careful examination of Table 1 will also reveal a substantial amount of missing data. It was impossible to include those debaters who failed to

respond to the question of perceived outcome in the results. This lack of response reduced the sample size to 146. Other calculations which follow are occasionally further reduced by the failure to respond to other questions.

Given the predictions of balance and reinforcement theories, it is important that we be able to examine the data from debaters who lost and knew that they lost and from those who won and knew that they won. Thus, we examined separately the results from those debaters who thought they won and actually did so: the winners (N = 68), those who thought they lost and actually did so: the losers (N = 22), and those who thought they won but actually lost: the confused (N = 50). [We have only six debaters who thought they lost but actually won. Hence, this category cannot be analyzed because of this small sample size.] For each of the three analysis groups, the perceptual distortion of height for the opposing team is presented in Table 2.

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Insert Table 2 about here

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Among the three groups, only the distortion scores for the confused fail to conform to any sort of theoretical pattern. It is therefore interesting to observe that the confused have the highest degree of variability, as seen by the large standard deviation of their scores. Further, the height distortion scores of the confused do not differ from no distortion at all (t = 1.17; df = 49; p is n. s.). We conclude that the confused debaters' deviation scores are essentially random. Further analysis of this group is abandoned.

Balance theory predicted that losers would perceive winners as being taller than they really are on the basis of enhanced status. The data are only suggestive

of this trend. The losers do see the winners as being +1.14 inches taller than they actually are but this difference only approaches and does not achieve the usual levels for statistical significance (t = 1.84; df = 21; $p < .10$). However, we must note that our total sample in this category is only 22. Further, the standard deviation of the distortion scores is the smallest of the three groups (Table 2) indicating a stable response pattern. If we add to these observations the fact that of the 22 losers, 18 of them distorted the height of the winning team in the predicted direction (upward), the consistency of the trend is apparent (by the sign test, $p < .002$). Overall, then, the magnitude of the distortion is only suggestive but the consistency of it is highly significant. The balance theory explanation of perceptual distortion is tentatively supported.

Reinforcement theory predicted that winning debaters would perceive the losing team as being taller than they really were since the losers were actually messengers of good news. That is, the losers just gave the winners a message that they (the winners) had advanced one step closer to acquiring a trophy. The prediction is strongly supported (t = 2.72; df = 64; $p < .01$). The winning team tends to see the losing team as being 1.20 inches taller than they really are. Further, this tendency among the winners does not seem to be based on the responses of only a few debaters with very large distortion scores. Of the 68 winners, 67.6% of them (N = 46) distorted the losers' heights upward as reinforcement theory predicted. This consistency of distortion is highly significant (by the sign test, $p < .002$). The reinforcement theory of perceptual distortion is strongly supported.

Finally, we must ask if it might not be the case that neither balance nor reinforcement theory is applicable. Perhaps these winners and losers, as compared to the confused, are simply people given to strong doses of overstatement. We may respond to this criticism in two ways. First, if the charge is accurate, then the consistency of the distortion could not be explained. Second, if the charge is accurate, then we might expect other perceptions to also be distorted for these persons. To verify this possibility we asked the debaters to estimate the height of the judge in each debate. Estimates of the judge's height made by the losers was -.10 and was not significantly different from no deviation (t = .18; df = 20; p is n.s.). The estimates of the judge's height made by the winners was +.11 and was also not different from zero (t = .33; df = 64; p is n.s.). Further, among the losers, 13 of the debaters distorted the judges' height upward with 9 distorting it downward. There is no consistency in the direction of these distortions (by the sign test, p = .262). The tendency among the winners was 38 upward and 30 downward (by the sign test, p = .162). Thus, it cannot be argued from either the standpoint of magnitude or consistency that our sample is composed of persons given to simple overstatement.

Overall, the reasons for these findings are evident upon reflection. Beginning with the observation that intercollegiate debate--at least for the participants--is extremely involving, it is understandable why so few debaters are willing to admit they lost an encounter. They suffer from the well known problem of spirited involvement in the activity and thus are at least partially blind to their own weaknesses and to the strengths of the other team (Cf: 5). Perceptual blindness is probably the reason for so many erroneous predictions

of winning. Apparently, however, there is a point at which the contest is so one-sided that no amount of enthusiasm can cloud the issue. In the extremely one-sided debate, the teams are naturally quite good at predicting the outcome. What we are saying is that when the contest is either obviously won or lost, the debaters are rather accurate in their predictions. When the outcome of the debate is not clearly apparent, perceptual blindness tends to cloud the issue and produce a psuedo-confidence and the subsequent prediction of a win. The confused debaters may not be nearly so "confused" as they are "hopeful."

This explanation of how debaters seem to structure their judgments of the outcome of an encounter serves to highlight a necessary and perhaps sufficient condition for the occurrence of the perceptual distortion of height. It may be that the environment must send an unambiguous message before the distortion can take place. For example, a number of investigations have presented the same person(s) to groups of college students varying the acacemic identity of the person to each group e.g. department chairman, professor and so forth (4, 10, 13, 16). If the students do not believe that the person actually possesses the academic status attributed to him, then it could be speculated that no distortion would be observed. As if to recognize this principle, one study eliminated all subjects who considered the target person a fake (13). Similarily, the ostensible reason that winners and losers distort the heights of the other debaters in the present investigation is because of the unmistakable message of the situation. On the other hand, for the confused/ hopeful, the message is uncertain and no distortion appears. The clarity of the

environmental/situational message seems to be directly related to the perceptual distortion.

In summary, there appear to be a number of conclusions which may be drawn from the present study. First, college debaters are apparently governed by the same dynamics as their highschool counterparts. They are quite accurate at predicting losses but not at predicting victories. Second, the college debater is clearly subject to the same nonverbal and perceptual phenomenon as the rest of society. Skill and training in using logic and the ability to make rational implications apparently do not insulate one from the distortion of perceptions concerning ongoing reality. Third, the perceptual distortion of height has been shown to operate under two very different theoretical circumstances. While the evidence for one theory is strong and for the other weak, neither reinforcement nor balance theory may be safely ignored at this point. What we had thought was a fairly simple perceptual response may be triggered by a complex variety of psychological expectations. At any rate, future studies of the perceptual distortion of height now have at least two theoretical lines of explanation to explore. Finally, these things have been demonstrated in a real world setting. This would indicate, for the first time, that the perceptual distortion of height is not simply an occurrence of the laboratory but extends to touch our everyday interactions.

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Table 1

Perceived Outcome of the Debate vs. Actual Outcome of the Debate

	The actual decision was that the debater had:	
	lost	won
The debater preceived that they:		
lost	22 (15%)	6 (04%)
won	50 (34%)	68 (47%)

Table 2

Summary data of distortion scores for each of the three analysis groups

	Mean Distortion	Standard Deviation	t	Significance Level
Winners (N = 68)	+1.20	3.55	2.72	.01
Losers (N = 22)	+1.14	2.83	1.84	.10
Confused (N = 50)	-.68	4.06	1.17	n.s.